

DIRECTORATE OF INTELLIGENCE

Industrial Facilities (Non-Military)

# Basic Imagery Interpretation Report

Major Chemical Plants North Korea



**Top Secret** 

25X1

RCS	13/0038/7 <b>1</b>	
		25X1
DATE	MAY 1971	
COPY	<b>4</b> .4 ≈4	

10



Approved For	Release 2008/05/29 : CIA-RDP79T00909A001	1000010021-2	25
	TOP SECRET RIIFE	RCS - 13/0038/71	25 25
	CENTRAL INTELLIGENCE AGENCY		

CENTRAL INTELLIGENCE AGENCY
Directorate of Intelligence
Imagery Analysis Service

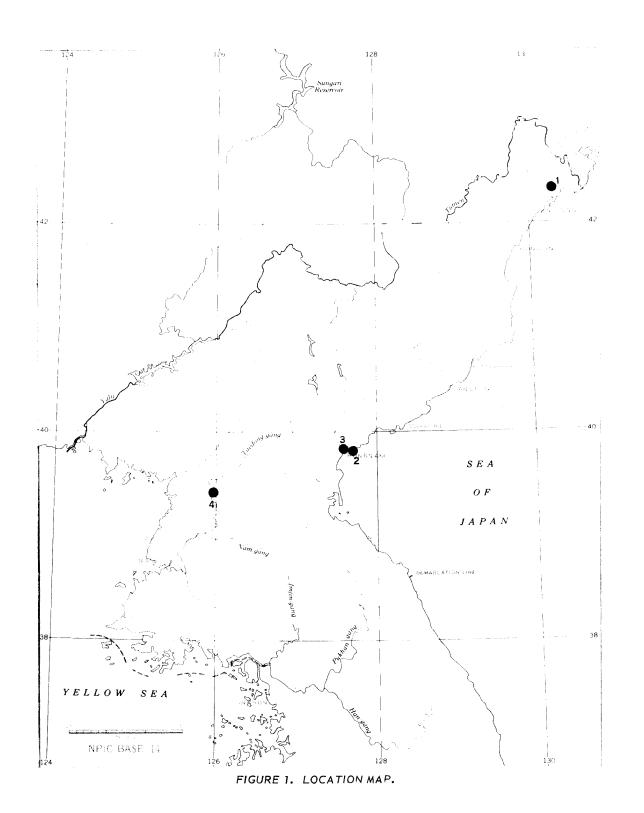
### **ABSTRACT**

This report updates the previous basic reports on four major chemical plants in North Korea. The cut-off date for information is January 1971.

Minor changes have been observed at three of the plants. An unidentified processing unit has been added to the ammonia synthesis building at Hungnam Nitrogen Fertilizer Plant and the ore handling facilities have been expanded at Sunchon Chemical Plant. Minor additions have been seen at facilities in the gas by-products and possible polyvinyl chloride production areas at Hungnam Chemical Plant Pongung. No changes were observed at Aoji Ri Synthetic Petroleum Plant Chosen.

All four plants were observed operating on the latest photography.

TOP SECRET RUFF





TOP SECRET RUFF



Approved F	or Release 2008/05/29 : CIA-RDP79T00909A0	01000010021-2	0574
	TOP SECRET RUFF		25X1 25X1

## INTRODUCTION

This report presents information on the current status of two chemical plants, a synthetic petroleum plant and a nitrogen fertilizer plant in North Korea (see Figure 1).

- I. Aoji Ri Synthetic Petroleum Plant Chosen.
- 2. Hungnam Nitrogen Fertilizer Plant.
- Hungnam Chemical Plant Pongung.
- 4. Sunchon Chemical Plant.

Requirement

COMIREX NOI Support Number 429218

-3-

		FCRFT RUFF	
			COUNTRY
NSTALLATION OR AC	CTIVITY NAME		COUNTRY
A D. C th.	ti. Deturbaum Dlant Chao	on.	KN
AOJI RI SYNTNE JTM COORDINATES	tic Petroleum Plant Chos	en	I
52TFC110090	42-31-12N 130-21-01E		
MAP REFERENCE		•	
		90-10HL, 4th ed, Jul 67, Scale	1:200,000
(SEC		NEGATION DATE (IT required)	
	<del></del>		
		NA	
	BASIC DE	SCRIPTION	
	BASTO DE	2301(11 1101(	
ivo apparo	in changes have been ebs	served at Aoji Ri Synthetic Pet	
Plant Chocan c	ince December 1968 the	date of the latest photography	used in
		date of the latest photography	used in
the previous r	eport.		
the previous r The prese	eport.  Ince of coal in the coal	receiving and storage area, th	e raised
the previous r The prese position of th	eport. ence of coal in the coal me gasholders, and vapors	receiving and storage area, the coming from the carbonization	e raised retorts/
the previous r  The prese position of th condenser hous plant was oper	eport.  Ince of coal in the coal The gasholders, and vapors The low-temperature The ing when seen on small	receiving and storage area, th	e raised retorts/   the
the previous r  The prese position of th condenser hous plant was oper	eport.  Ince of coal in the coal The gasholders, and vapors The low-temperature The ing when seen on small	receiving and storage area, the coming from the carbonization plant indicated	e raised retorts/   the
the previous r  The prese position of th condenser hous plant was oper	eport. ence of coal in the coal ne gasholders, and vapors ne in the low-temperature rating when seen on small	receiving and storage area, the coming from the carbonization e carbonization plant indicated -scale photography of March an	e raised retorts/   the
the previous r The prese position of th condenser hous	eport. ence of coal in the coal ne gasholders, and vapors ne in the low-temperature rating when seen on small	receiving and storage area, the coming from the carbonization plant indicated	e raised retorts/   the
the previous r  The prese position of th condenser hous plant was oper	eport. ence of coal in the coal ne gasholders, and vapors ne in the low-temperature rating when seen on small	receiving and storage area, the coming from the carbonization e carbonization plant indicated -scale photography of March an	e raised retorts/   the
the previous r  The prese position of th condenser hous plant was oper	eport. ence of coal in the coal ne gasholders, and vapors ne in the low-temperature rating when seen on small	receiving and storage area, the coming from the carbonization e carbonization plant indicated -scale photography of March an	ne raised retorts/   the
the previous r  The prese position of th condenser hous plant was oper	eport. ence of coal in the coal ne gasholders, and vapors ne in the low-temperature rating when seen on small	receiving and storage area, the coming from the carbonization e carbonization plant indicated -scale photography of March an	ne raised retorts/   the
the previous r  The prese position of th condenser hous plant was oper	eport. ence of coal in the coal ne gasholders, and vapors ne in the low-temperature rating when seen on small	receiving and storage area, the coming from the carbonization e carbonization plant indicated -scale photography of March an	ne raised retorts/   the
the previous r  The prese position of th condenser hous plant was oper	eport. ence of coal in the coal ne gasholders, and vapors ne in the low-temperature rating when seen on small	receiving and storage area, the coming from the carbonization e carbonization plant indicated -scale photography of March an	ne raised retorts/   the
the previous r  The prese position of th condenser hous plant was oper	eport. ence of coal in the coal ne gasholders, and vapors ne in the low-temperature rating when seen on small	receiving and storage area, the coming from the carbonization e carbonization plant indicated -scale photography of March an	ne raised retorts/   the
the previous r  The prese position of th condenser hous plant was oper	eport. ence of coal in the coal ne gasholders, and vapors ne in the low-temperature rating when seen on small	receiving and storage area, the coming from the carbonization e carbonization plant indicated -scale photography of March an	ne raised retorts/   the
the previous r  The prese position of th condenser hous plant was oper November 1970.	eport. ence of coal in the coal ne gasholders, and vapors ne in the low-temperature rating when seen on small	receiving and storage area, the coming from the carbonization e carbonization plant indicated -scale photography of March an	ne raised retorts/   the
The prese position of the condenser hous plant was oper November 1970.	report.  Ince of coal in the coal are gasholders, and vapors are in the low-temperature ating when seen on small REF	receiving and storage area, the coming from the carbonization plant indicated -scale photography of March and FERENCES	ne raised retorts/   the
The prese position of the condenser house plant was oper November 1970.  Document  CIA. RCS - Kyongh	eport.  Ince of coal in the coal are gasholders, and vapors are in the low-temperature ating when seen on small REF	receiving and storage area, the coming from the carbonization plant indicated -scale photography of March and FERENCES	ne raised retorts/   the
The prese position of the condenser house plant was oper November 1970.  Document  CIA. RCS - Kyongh	report.  Ince of coal in the coal in the gasholders, and vapors in the low-temperature rating when seen on small REF	receiving and storage area, the coming from the carbonization plant indicated -scale photography of March and FERENCES	ne raised retorts/ I the ad
The prese position of the condenser house plant was oper November 1970.  Document  CIA. RCS - Kyongh	eport.  Ince of coal in the coal are gasholders, and vapors are in the low-temperature ating when seen on small REF	receiving and storage area, the coming from the carbonization plant indicated -scale photography of March and FERENCES	ne raised retorts/ I the ad
The prese position of the condenser house plant was oper November 1970.  Document  CIA. RCS - Kyongh	eport.  Ince of coal in the coal are gasholders, and vapors are in the low-temperature ating when seen on small REF	receiving and storage area, the coming from the carbonization plant indicated -scale photography of March and FERENCES	ne raised retorts/ I the ad
The prese position of the condenser house plant was oper November 1970.  Document  CIA. RCS - Kyongh	eport.  Ince of coal in the coal are gasholders, and vapors are in the low-temperature ating when seen on small REF	receiving and storage area, the coming from the carbonization plant indicated -scale photography of March and FERENCES	ne raised retorts/ I the ad



Approved I	For Release 2008/0	5/29 : CIA-RDP79	T00909A0010	00010021-2
	TOP SEC	RET RUFF		
INSTALLATION OR ACTIVITY NAME				COUNTRY
			1	
Hungnam Nitrogen Fertiliz				KN
	. **			
MAP REFERENCE	1 127-37-12E	1		
548th RTG. USATC, Series	200. Sheet M038(	D-4HL. 4th ed.	Apr 68. Scal	e 1:200.000
(SECRET				
LATEST IMAGERY USED		NEGATION DATE (If	equired)	
			NA	
	BASIC DESC	CRIPTION		
of the ammonia synthesis November 1968, the date of Other changes observed at buildings and the dismant Partial coverage of	of the latest pho the plant inclu- ling of one unio	otography used ude the constru dentified build	in the previ ction of thr ing (see Fig	ous r <b>eport.</b> ee support ure 2).
the sulfuric acid and sup ammonium sulfate producti photography. The presenc coming from the sulfuric production areas indicate	erphosphate prod on area was also e of rail cars w acid, ammonium s	duction areas wo seen operatin within the plan sulfate, nitric	ere operatin g on the Mar t and vapors acid, and g	g. The ch 1970 seen as
•	REFERENC	CES		
Document				
CIA. RCS - 13/0235/69, June 1969,	(TOP SE	n Fertilizer P CRET RUFF) 6-	lant, North	Korea,
		•		
	TOP SEC	RET RUFF		

# Page Denied

		101 35	CRET RUFF			25X
						207
NSTALLATION OR AC	CTIVITY NAME			C	OUNTRY	
lungnam Chemic		ongung coordinates			<u>KN</u>	0.E.V
2SCV790118	1	127-35-08E			2	25 <b>&gt;</b> 
AP REFERENCE	1					
48th RTG. USA	TC, <u>Series</u>	200. Sheet M038	80-4HL. 4th ed.	Anr 68. Scale L	:200.000	05)
(SE	CRET					25 <b>X</b>
ATEST IMAGERY US	ED		NEGATION DATE (If r	equired)		
						25X
			1	NA		
		BASIC DE	ESCRIPTION			
No signif	icant chan	gos have been -4	oserved in the p		* 4 *	
t Hunanam Che	mical Plan	t Pongung since	February 1969,	the date of the	lites Tataat	
hotography us	ed in the	previous report	. Some minor ad	ine date of the	Talesi	
nologiaphy us † facilities	in the das	hy-products pro	oduction area an	d nossible nolv	served vinyl	
hloride produ	ction area	. In addition.	minor construct	ion and dismant	vinyi Lina	
ctivity has b	een observ	ed throughout th	ne plant (see Fig	gure 3).		
me pram	was III OD	eration when obs		l		
arch 1970. Si	moke comin	a from the stack	served on partia	l coverage of	205	
arch 1970. Si nd fluctuation	moke comin	g from the stack	ks of the calcium	n carbide furnac	ces it	
nd fluctuation	moke comin ns in the	g from the stack	ks of the calcium cars within the p	n carbide furnac	ces it	
nd fluctuation	moke comin ns in the	g from the stack number of rail o	ks of the calcium cars within the p	n carbide furnac	ces it	
nd fluctuation	moke comin ns in the	g from the stack number of rail o	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25 <b>X</b>
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25 <b>X</b>
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25 <b>X</b>
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25 <b>X</b>
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25X
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25 <b>X</b>
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25 <b>X</b>
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25X
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25)
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25 <b>X</b>
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25 <b>X</b>
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25)
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25X
nd fluctuation	moke comin ns in the	g from the stack number of rail o vember 1970 and	ks of the calcium cars within the p January 1971.	n carbide furnac	1†	25X
nd fluctuation	moke comin ns in the ting in No	g from the stack number of rail o vember 1970 and REFERE	ks of the calcium cars within the p January 1971.	m carbide furnac	1†	25X
nd fluctuation as also opera	moke cominns in the ting in No	g from the stack number of rail o vember 1970 and  REFERE	al Plant Pongunc	m carbide furnac	1†	
nd fluctuation	moke cominns in the ting in No	g from the stack number of rail o vember 1970 and  REFERE	ks of the calcium cars within the p January 1971.	m carbide furnac	1†	
cia. RCS - I	moke cominns in the ting in No	g from the stack number of rail o vember 1970 and  REFERE	al Plant Pongunc	m carbide furnac	1†	25X 25X 25X

25X1
TOP SECRET RUFF 25X1
25X1

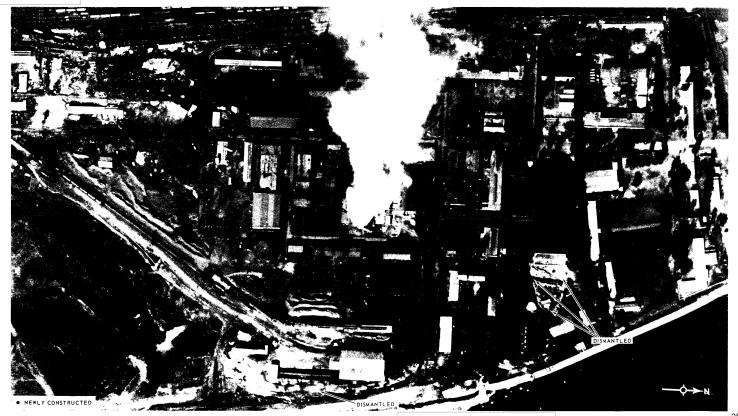


FIGURE 4. SUNCHON CHEMICAL PLANT, NORTH KOREA,

TOP SECRET RUFF

25X1 25X1 25X1

	TOP SECRET	r RUFF		
NSTALLATION OR ACTIVITY NAME			COUNT	RY
unchon Chemical Plant TM COORDINATES   GEOGRAPHIC	COORDINATES		l	KN
i '	N 125-56-35E			
AP REFERENCE				
5th RTS. USATC, Series 2	00, Sheet M0380-3HL	., 5th ed, Feb 6	8, Scale 1:200,	,000
(SECRET)				
ATEST IMAGERY USED	NEG	ATION DATE (If required	1)	
			NA	<del></del>
	BASIC DESCR	IPTION		
Minor changes have b	een observed at Sun	chon Chemical F	Plant since Sent	ember
968, the date of the lat	est photography use	d in the previo	ous report. In	
ovember 1969, the ore ha uildings had been dismar	ndling facilities h tled — In March 197	ad been expande O additions wer	ed, and four sup	port
everal small support bui	Idings. These addi-	tions were comp	lete by Septemb	er
970 (see Figure 4). No	changes were observ	ed at the proce	ssing facilitie	es.
Smoke seen coming fr	om the stack of the	rotary kiln bu	ilding in Novem	nber
969, September 1970, and	January 1971 indic	ated that the p	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indicators not be determined	ated that the p if the plant wa	lant was operat	ing
969, September 1970, and	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indicators not be determined	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and n these dates. It could	January 1971 indic not be determined ity of the photogra	ated that the p if the plant wa phy.	lant was operat	ing
969, September 1970, and nothese dates. It could gar and gar a	January 1971 indicanot be determined ity of the photogra REFERENCES	ated that the pif the plant wa	lant was operats operating in	ing
969, September 1970, and n these dates. It could 970 due to the poor qual	January 1971 indic not be determined ity of the photogra	ated that the pif the plant wa	lant was operats operating in	ing
969, September 1970, and n these dates. It could 970 due to the poor qual	January 1971 indicond be determined ity of the photogra REFERENCES	ated that the pif the plant wa	lant was operats operating in	ing

# **Top Secret**

## **Top Secret**